Serverless Architecture:

Assignment1:

Created Auto-Start EC2:

A screenshot of a computer

Description automatically generatedCreated Auto-stop EC2

A screenshot of a computer

Description automatically generated

Created IAM Role with Full EC2 Access to Lambda functions to call AWS Services

A screenshot of a computer

Description automatically generated

Added the python code in lambda function.A screenshot of a computer

Description automatically generated

Python Code : Uploaded to Github repository : <https://github.com/kiran-umesh/serverless_arch_HV_assignment.git>

Created Lambda Function:A screenshot of a computer

Description automatically generated

A screenshot of a computer

Description automatically generated

A screenshot of a computer

Description automatically generated

Deployed and tested the code. code executed sucesfully.A screenshot of a computer

Description automatically generated

**Assignment 2: S3 Bucket cleanup**

**S3** Bucket setup with files both new and older than 30 days:

A screenshot of a computer

Description automatically generated

Created IAM role for Lambda function:

A screenshot of a computer

Description automatically generated

Added the Python code documented into the file [S3\_delete\_old\_object](https://github.com/kiran-umesh/serverless_arch_HV_assignment/blob/main/S3_delete_old_object) on the github intothe Lambda function.

Created Test Event:

A screenshot of a computer

Description automatically generated

Tested the code which deleted the old file:

A screenshot of a computer

Description automatically generated

**Assignment 3**: Monitor Unencrypted S3 Buckets using Lambda & Boto3

Created the IAM role for lambda function

A screenshot of a computer

Description automatically generated

Utilizing the existing Lambda function, updated the Python code

A screenshot of a computer

Description automatically generated

Python code has been uploaded to github with filename: [detect\_unecrypted\_duckets.py](https://github.com/kiran-umesh/serverless_arch_HV_assignment/blob/main/detect_unecrypted_duckets.py)

Tested and executed the code successfully:

A close-up of a computer screen

Description automatically generated

**Assignment 4**: Automatic EBS Snapshot & Cleanup using Lambda and Boto3

Created a EC2 instance :

A screenshot of a computer

Description automatically generated

And an EBS volume:

A screenshot of a computer

Description automatically generated

Added role AmazonEC2FullAccess to IAM

A screenshot of a computer

Description automatically generated

Updated existing Lambda function with necessary Python code

A screenshot of a computer

Description automatically generated

Python code has been uploaded to Github with file name: [EBSS\_Snapshot](https://github.com/kiran-umesh/serverless_arch_HV_assignment/blob/main/EBSS_Snapshot)

Tested and executed the code successfully:

A screenshot of a computer

Description automatically generated